(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date 31 December 2003 (31.12.2003)

PCT

(10) International Publication Number WO 2004/000383 A3

(51) International Patent Classification⁷: 27/34

A61L 31/10,

(21) International Application Number:

PCT/US2003/015544

(22) International Filing Date:

14 May 2003 (14.05.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 10/176,504

21 June 2002 (21.06.2002) US

- (71) Applicant: ADVANCED CARDIOVASCULAR SYS-TEMS, INC [US/US]; 3200 Lakeside Drive, Santa Clara, CA 95054 (US).
- (72) Inventors: ROORDA, Wouter, E.; 36 Roosevelt Circle, Palo Alto, CA 94306 (US). DING, Ni; 4103 Cortona Court, San Jose, Ca 95135 (US). PACETTI, Stephen, D.; 4578 Madoc Way, San Jose, CA 95130 (US). MICHAL, Eugene, T.; 56 Lower Terrace, San Francisco, CA 94114 (US). SHAH, Ashok, A.; 1571 Four Oaks Road, San Jose, CA 95131 (US). HOSSAINY, Syed, F., A.; 34325 Tupelo Street, Fremont, CA 94555 (US).

- (74) Agent: KERRIGAN, Cameron; Squire, Sanders & Dempsey L.L.P., 600 Hansen Way, Palo Alto, CA 94303-1043 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- (88) Date of publication of the international search report: 27 May 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



004/000383 A

INTERNATIONAL SEARCH REPORT

PCT/US 03/15544

			33 03/ 13344		
A. CLASSIF IPC 7	FICATION OF SUBJECT MATTER A61L31/10 A61L27/34		•		
According to	o International Patent Classification (IPC) or to both national class	ification and IPC			
B. FIELDS			/		
Minimum do	cumentation searched (classification system tollowed by classific $A61L$		·		
	ion searched other than minimum documentation to the extent th				
	ata base consulted during the International search (name of data ternal, CHEM ABS Data, PAJ, WPI Da		iiia usauj		
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the	relevant passages	Relevant to claim No.		
X	"ROLLING THERAPEUTIC AGENT LOAD FOR THERAPEUTIC AGENT DELIVERY STENT" RESEARCH DISCLOSURE, KENNETH MA PUBLICATIONS, HAMPSHIRE, GB, no June 2000 (2000-06), page 975, ISSN: 0374-4353 *entire document*	OR COATED ASON 2. 434,	1,2,4,5		
х	NOVICK, SCOTT J. ET AL: "Protein-containing hydrophobic and films" BIOMATERIALS (2001), VOLUME DATE 23(2), 441-448, XP002252591 *abstract*	TE 2002,	1,2,4,5		
		-/			
	·		·		
X Funt	her documents are listed in the continuation of box C.	Patent family members a	are listed in annex.		
"A" docume consider if filing of the citation other if the citation of the cit	ategories of cited documents: ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date on the content of the content of the content of the content of the content relevance or is cited to establish the publication date of another in or other special reason (as specified) sent referring to an oral disclosure, use, exhibition or means ent published prior to the International filling date but han the priority date claimed actual completion of the international search	or priority date and not in coldited to understand the principle invention. "X" document of particular releval cannot be considered novel involve an inventive step which cannot be considered to inventive step which cannot be considered to inventive such combination be in the art. "8" document member of the same particular relevance in the art. "Bate of mailing of the internal	'X' document of panicular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of panicular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family Date of mailing of the international search report		
3	September 2003	2 3. 01. 20	· ·		
Name and I	mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016	Authorized officer Schnack, A	 		

INTERNATIONAL SEARCH REPORT

Internation Application No
PCT/US 03/15544

		PC1/US 03/15544
C.(Continue	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	WO 00/29043 A (HABERBOSCH WERNER; JUSTUS LIEBIG UNI GIESSEN (DE); CHRISTOPHE BURE) 25 May 2000 (2000-05-25) claims 1-26 examples 1-4	1-5
X	US 2001/014717 A1 (HOSSAINY SYED F A ET AL) 16 August 2001 (2001-08-16) '0031!-'0042!, '0080! claims 1-36	1,2,4,5
x	WO 99/55396 A (SURMODICS INC) 4 November 1999 (1999-11-04) page 4, line 1 - page 8, line 30 example 1	1-9
χ	WO 02/24249 A (BINDERMAN ITZHAK ; KOOLE	1,2,4,5
Y	LEVINAS H (NL)) 28 March 2002 (2002-03-28) page 4, line 5 - line 30 page 6, line 26 - page 8, line 11 page 12, line 1 - line 27 page 16, line 5 - page 17, line 8	3
X	US 6 110 483 A (ZHANG XIANPING ET AL) 29 August 2000 (2000-08-29) column 3, line 65 - column 6, line 16 claims 1-40	1-8
P,X Y	WO 03/022324 A (ABBOTT LAB) 20 March 2003 (2003-03-20) page 16, line 19 - page 17, line 22	1,2,4,5
		·
	·	
	•	

INTERNATIONAL SEARCH REPORT

Interlation No. PCT/US 03/15544

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)	
This international Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:	
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:	
Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)	_
This International Searching Authority found multiple inventions in this international application, as follows:	
see additional sheet	·
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.	
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.	
3. As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:	
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-9	
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-9

A coating for an implantable medical device, comprising a thermoplastic polyacrylate material free from acetate species and a herapeutically active agent incorporated therein.

2. claims: 10-27

A coating for an implantable medical device, the coating comprising a first layer having an active agent incorporated therein and a second layer disposed over the first layer, wherein the second layer comprise a thermoplastic polyacrylate material for modifying the rate of release of the agent.

INTERNATIONAL SEARCH REPORT INTERMEDIATION ON PATENT TAMBU MEMBERS

Internati Application No PCT/US 03/15544

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 0029043	. A	25-05-2000	FR AU CA EP WO JP US	2785812 A1 1168100 A 2349930 A1 1131113 A1 0029043 A1 2002529203 T 6517858 B1	19-05-2000 05-06-2000 25-05-2000 12-09-2001 25-05-2000 10-09-2002 11-02-2003
US 2001014717	A 1	16-08-2001	US EP WO AU CA EP JP WO US AU	2002193475 A1 1347792 A2 02058753 A2 2449601 A 2395199 A1 1242130 A1 2003517890 T 0145763 A1 2001018469 A1 4197401 A 0174415 A1	11-02-2003 19-12-2002 01-10-2003 01-08-2002 03-07-2001 28-06-2001 25-09-2002 03-06-2003 28-06-2001 30-08-2001 15-10-2001
WO 9955396	A	04-11-1999	AT AU CA DE DE DE EP EP JP VO US US	219693 T 760408 B2 3563899 A 2320259 A1 69901927 D1 69901927 T2 1019111 T3 1174157 A1 1019111 A1 2179646 T3 3406903 B2 2002512856 T 1019111 T 9955396 A1 2003031780 A1 6214901 B1 6344035 B1 2002032434 A1	15-07-2002 15-05-2003 16-11-1999 04-11-1999 01-08-2002 10-10-2002 14-10-2002 23-01-2002 19-07-2000 16-01-2003 19-05-2003 08-05-2002 31-10-2002 04-11-1999 13-02-2003 10-04-2001 05-02-2002 14-03-2002
WO 0224249	A	28-03-2002	AU WO US	2095002 A 0224249 A2 2002065551 A1	02-04-2002 28-03-2002 30-05-2002
US 6110483	A	29-08-2000	AU CN EP JP WO	8159898 A 1261288 T 1003571 A2 2002506369 T 9858690 A2	04-01-1999 26-07-2000 31-05-2000 26-02-2002 30-12-1998
WO 03022324	A	20-03-2003	US WO WO US	2002123505 A1 03022807 A2 03022324 A1 2003129215 A1	05-09-2002 20-03-2003 20-03-2003 10-07-2003